applying said formulation to the skin of a mammal to reduce the absorption of ultraviolet radiation by the skin of said mammal.

6. The method of claim 5, wherein the nucleic acids are DNA.

7. The method of claim 5, wherein the nucleic acids are DNA of an average size at least about 100 base pairs.

8. The method of claim 5, wherein the ultraviolet radiation is UVB radiation.

9. (previously amended) The method of claim 5, wherein applying said formulation to said mammal results in a reduction in the amount of ultraviolet radiation absorbed by the skin of said mammal.

10. (previously amended) The method of claim 5, wherein applying said formulation to said mammal results in at least about a 90% reduction in the amount of ultraviolet radiation absorbed by the skin of said mammal.

11. (previously amended) The method of claim 5, wherein applying said formulation results in at least about a 95% reduction in the amount of ultraviolet radiation absorbed by the skin of said mammal.

12. (previously amended) The method of claim 5, wherein applying said formulation results in at least about a 99% reduction in the amount of ultraviolet radiation absorbed by the skin of said mammal.

13. (previously amended) The method of claim 5, wherein the ultraviolet radiation absorbed by the skin of the mammal is less than a minimum erythemal dose for the mammal after a one hour exposure to the ultraviolet radiation.

14. (previously amended) The method of claim 5, wherein the ultraviolet radiation absorbed by the skin of the mammal is less than a minimum erythemal dose for the mammal after a four hour exposure to the ultraviolet radiation.

15. (previously amended) The method of claim 5, wherein the ultraviolet radiation absorbed by the skin of the mammal is less than a minimum erythemal dose for the mammal after an eight hour exposure to the ultraviolet radiation.

16. The method of claim 5, wherein the mammal is human.

17. The method of claim 5, wherein the mammal is a dog or a cat.

**Please cancel claims 18-34 without prejudice or disclaimer.**

35. **(amended)**The method of claim 5, wherein the nucleic acids are modified by ethylation, cross linking, ultraviolet induced cross-linking, or the formation of thymidine dimers.

36. **(amended)**he method of claim 5, wherein the nucleic acids are less than 100 base pairs.

37. **(amended)**The method of claim 5, wherein the nucleic acids are in a cholerestic liquid phase, a lyotropic liquid crystal phase, or a precholesteric phase.

38. **(amended)**The method of claim 5, wherein the nucleic acids are single stranded, double stranded, or triple stranded.

39. (previously amended) The method of claim 5, wherein the formulation further comprises a compound selected from the group consisting of apurinic acids, purines, and uric acids.

40. The method of claim 5, wherein the formulation further comprises a compound selected from the group consisting of water, alcohols, water-soluble alcohols, dimethyl sulfa oxide, antifungal agents, antibacterial agents, buffers, perfumes, dyes, aloe, and sorbitols.

**Please cancel claim 41 without prejudice or disclaimer.**

42. The method of claim 40, wherein the buffer is phosphate, HEPES, or TRIS.

**Please cancel claims 43-46 without prejudice or disclaimer.**

47. (allowable) A method to reduce the absorption of ultraviolet radiation by the skin of a mammal, the method comprising:

providing a formulation comprising a nucleic acid, the nucleic acid having a molecular weight greater than 5000 base pairs; and

applying the formulation to the skin of a mammal to reduce the absorption of ultraviolet radiation by the skin of said mammal.

**Please cancel claims 48-52 without prejudice or disclaimer.**

53. **(NEW)** The method of claim 47, wherein the nucleic acid is DNA.

54. **(NEW)** The method of claim 47, wherein the nucleic acid is DNA of an average size at least about 100 base pairs.

55. **(NEW)** The method of claim 47, wherein the ultraviolet radiation is UVB radiation.

56. **(NEW)** The method of claim 47, wherein applying said formulation to said mammal results in a reduction in the amount of ultraviolet radiation absorbed by the skin of said mammal.

57. **(NEW)** The method of claim 47, wherein applying said formulation to said mammal results in at least about a 90% reduction in the amount of ultraviolet radiation absorbed by the skin of said mammal.

58. **(NEW)** The method of claim 47, wherein applying said formulation results in at least about a 95% reduction in the amount of ultraviolet radiation absorbed by the skin of said mammal.

59. **(NEW)** The method of claim 47, wherein applying said formulation results in at least about a 99% reduction in the amount of ultraviolet radiation absorbed by the skin of said mammal.